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coatings and adhesives, in any wood furniture manufacturing operations.

- (b) Each owner or operator of a new affected source subject to this subpart shall:
- (1) Limit VHAP emissions from finishing operations by meeting the emission limitations for new sources presented in Table 3 of this subpart using any of the compliance methods in §63.804(d). To determine VHAP emissions from a finishing material containing formaldehyde or styrene, the owner or operator of the affected source shall use the methods presented in §63.803(1)(2) for determining styrene and formaldehyde usage.
- (2) Limit VHAP emissions from contact adhesives by achieving a VHAP limit for contact adhesives, excluding aerosol adhesives and excluding contact adhesives applied to nonporous substrates, of no greater than 0.2 kg VHAP/kg solids (0.2 lb VHAP/lb solids), as applied, using either of the compliance methods in §63.804(e).
- (3) Limit HAP emissions from strippable spray booth coatings by using coatings that contain no more than 0.8 kg VOC/kg solids (0.8 lb VOC/lb solids), as applied.
- (4) Limit formaldehyde emissions by complying with the provisions specified in either paragraph (b)(4)(i) or (b)(4)(ii) of this section.
- (i) Limit total formaldehyde ( $F_{\text{total}}$ ) use in coatings and contact adhesives to no more than 400 pounds per rolling 12 month period.
- (ii) Use coatings and contact adhesives only if they are low-formaldehyde coatings and adhesives, in any wood furniture manufacturing operations.
- (c) At all times, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance

nance records, and inspection of the source

[60 FR 62936, Dec. 7, 1995, as amended at 76 FR 72072, Nov. 21, 2011]

## §63.803 Work practice standards.

- (a) Work practice implementation plan.
  (1) Each owner or operator of an affected source subject to this subpart shall prepare and maintain a written work practice implementation plan that defines environmentally desirable work practices for each wood furniture operation manufacturing operation and addresses each of the work practice standards presented in paragraphs (b) through (1) of this section. The plan shall be developed no more than 60 days after the compliance date.
- (2) The written work practice implementation plan shall be available for inspection by the Administrator (or delegated State, local, or Tribal authority) upon request. If the Administrator (or delegated State, local, or Tribal authority) determines that the work practice implementation plan does not include sufficient mechanisms for ensuring that the work practice standards are being implemented, the Administrator (or delegated State, local, or Tribal authority) may require the affected source to modify the plan. Revisions or modifications to the plan do not require a revision of the source's Title V permit.
- (3) The inspection and maintenance plan required by paragraph (c) of this section and the formulation assessment plan for finishing operations required by paragraph (l) of this section are also reviewable by the Administrator (or delegated State, local, or Tribal authority).
- (b) Operator training course. Each owner or operator of an affected source shall train all new and existing personnel, including contract personnel, who are involved in finishing, gluing, cleaning, and washoff operations, use of manufacturing equipment, or implementation of the requirements of this subpart. All new personnel, those hired after the compliance date of the standard, shall be trained upon hiring. All existing personnel, those hired before the compliance date of the standard, shall be trained within six months of the compliance date of the standard.

All personnel shall be given refresher training annually. The affected source shall maintain a copy of the training program with the work practice implementation plan. The training program shall include, at a minimum, the following:

- (1) A list of all current personnel by name and job description that are reouired to be trained:
- (2) An outline of the subjects to be covered in the initial and refresher training for each position or group of personnel;
- (3) Lesson plans for courses to be given at the initial and the annual refresher training that include, at a minimum, appropriate application techniques, appropriate cleaning and washoff procedures, appropriate equipment setup and adjustment to minimize finishing material usage and overspray, and appropriate management of cleanup wastes; and
- (4) A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion.
- (c) Inspection and maintenance plan. Each owner or operator of an affected source shall prepare and maintain with the work practice implementation plan a written leak inspection and maintenance plan that specifies:
- (1) A minimum visual inspection frequency of once per month for all equipment used to transfer or apply coatings, adhesives, or organic HAP solvents:
  - (2) An inspection schedule;
- (3) Methods for documenting the date and results of each inspection and any repairs that were made;
- (4) The timeframe between identifying the leak and making the repair, which adheres, at a minimum, to the following schedule:
- (i) A first attempt at repair (e.g., tightening of packing glands) shall be made no later than five calendar days after the leak is detected; and
- (ii) Final repairs shall be made within 15 calendar days after the leak is detected, unless the leaking equipment is to be replaced by a new purchase, in which case repairs shall be completed within three months.
- (d) Cleaning and washoff solvent accounting system. Each owner or oper-

- ator of an affected source shall develop an organic HAP solvent accounting form to record:
- (1) The quantity and type of organic HAP solvent used each month for washoff and cleaning, as defined in §63.801 of this subpart;
- (2) The number of pieces washed off, and the reason for the washoff; and
- (3) The quantity of spent organic HAP solvent generated from each washoff and cleaning operation each month, and whether it is recycled onsite or disposed offsite.
- (e) Chemical composition of cleaning and washoff solvents. Each owner or operator of an affected source shall not use cleaning or washoff solvents that contain any of the pollutants listed in Table 4 to this subpart, in concentrations subject to MSDS reporting as required by OSHA.
- (f) Spray booth cleaning. Each owner or operator of an affected source shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, or plastic filters unless the spray booth is being refurbished. If the spray booth is being refurbished, that is the spray booth coating or other protective material used to cover the booth is being replaced, the affected source shall use no more than 1.0 gallon of organic HAP solvent per booth to prepare the surface of the booth prior to applying the booth coating.
- (g) Storage requirements. Each owner or operator of an affected source shall use normally closed containers for storing finishing, gluing, cleaning, and washoff materials.
- (h) Application equipment requirements. Each owner or operator of an affected source shall not use conventional air spray guns except when all emissions from the finishing application station are routed to a functioning control device.
- (i) Line cleaning. Each owner or operator of an affected source shall pump or drain all organic HAP solvent used for line cleaning into a normally closed container.
- (j) Gun cleaning. Each owner or operator of an affected source shall collect all organic HAP solvent used to clean

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spray guns into a normally closed container.

- (k) Washoff operations. Each owner or operator of an affected source shall control emissions from washoff operations by:
- (1) Using normally closed tanks for washoff; and
- (2) Minimizing dripping by tilting or rotating the part to drain as much solvent as possible.
- (1) Formulation assessment plan for finishing operations. Each owner or operator of an affected source shall prepare and maintain with the work practice implementation plan a formulation assessment plan that:
- (1) Identifies VHAP from the list presented in Table 5 of this subpart that are being used in finishing operations by the affected source;
- (2) Establishes a baseline level of usage by the affected source, for each VHAP identified in paragraph (1)(1) of this section. The baseline usage level shall be the highest annual usage from 1994, 1995, or 1996, for each VHAP identified in paragraph (1)(1) of this section. For formaldehyde, the baseline level of usage shall be based on the amount of free formaldehyde present in the finishing material when it is applied. For styrene, the baseline level of usage shall be an estimate of unreacted styrene, which shall be calculated by multiplying the amount of styrene monomer in the finishing material, when it is applied, by a factor of 0.16. Sources using a control device to reduce emissions may adjust their usage based on the overall control efficiency of the control system, which is determined using the equation in §63.805 (d) or (e).
- (3) Tracks the annual usage of each VHAP identified in (1)(1) by the affected source that is present in amounts subject to MSDS reporting as required by OSHA.
- (4) If, after November 1998, the annual usage of the VHAP identified in paragraph (1)(1) exceeds its baseline level, then the owner or operator of the affected source shall provide a written notification to the permitting authority that describes the amount of the increase and explains the reasons for exceedance of the baseline level. The following explanations would relieve the owner or operator from further action,

unless the affected source is not in compliance with any State regulations or requirements for that VHAP:

- (i) The exceedance is no more than 15.0 percent above the baseline level;
- (ii) Usage of the VHAP is below the de minimis level presented in Table 5 of this subpart for that VHAP (sources using a control device to reduce emissions may adjust their usage based on the overall control efficiency of the control system, which is determined using the procedures in §63.805 (d) or (e):
- (iii) The affected source is in compliance with its State's air toxic regulations or guidelines for the VHAP; or
- (iv) The source of the pollutant is a finishing material with a VOC content of no more than 1.0 kg VOC/kg solids (1.0 lb VOC/lb solids), as applied.
- (5) If none of the above explanations are the reason for the increase, the owner or operator shall confer with the permitting authority to discuss the reason for the increase and whether there are practical and reasonable technology-based solutions for reducing the usage. The evaluation of whether a technology is reasonable and practical shall be based on cost, quality, and marketability of the product, whether the technology is being used successfully by other wood furniture manufacturing operations, or other criteria mutually agreed upon by the permitting authority and owner or operator. If there are no practical and reasonable solutions, the facility need take no further action. If there are solutions, the owner or operator shall develop a plan to reduce usage of the pollutant to the extent feasible. The plan shall address the approach to be used to reduce emissions, a timetable for implementing the plan, and a schedule for submitting notification of progress.
- (6) If, after November 1998, an affected source uses a VHAP of potential concern listed in table 6 of this subpart for which a baseline level has not been previously established, then the baseline level shall be established as the *de minimis* level provided in that same table for that chemical. The affected source shall track the annual usage of each VHAP of potential concern identified in this paragraph that is present in amounts subject to MSDS reporting as

required by OSHA. If usage of the VHAP of potential concern exceeds the de minimis level listed in table 6 of this subpart for that chemical, then the affected source shall provide an explanation to the permitting authority that documents the reason for the exceedance of the de minimis level. If the explanation is not one of those listed in paragraphs (1)(4)(i) through (1)(4)(iv) of this section, the affected source shall follow the procedures in paragraph (1)(5) of this section.

[60 FR 62936, Dec. 7, 1995, as amended at 63 FR 71380, Dec. 28, 1998; 68 FR 37353, June 23, 2003; 76 FR 72073, Nov. 21, 2011]

## § 63.804 Compliance procedures and monitoring requirements.

- (a) The owner or operator of an existing affected source subject to §63.802(a)(1) shall comply with those provisions using any of the methods presented in §63.804 (a)(1) through (a)(4).
- (1) Calculate the average VHAP content for all finishing materials used at the facility using Equation 1, and maintain a value of E no greater than 1.0:

$$\begin{array}{l} E{\rm{ = }}({M_{\rm{c1}}}\;{C_{\rm{c1}}}\; + \;{M_{\rm{c2}}}\;{C_{\rm{c2}}}\; + \; * \; * \; * \; + \;{M_{\rm{cn}}}\;{C_{\rm{cn}}}\; + \\ {S_1}\;{W_1}\; + \;{S_2}\;{W_2}\; + \; * \; * \; * \;{S_n}\;{W_n}{/({M_{\rm{c1}}}}\; + \\ {M_{\rm{c2}}}\; + \; * \; * \; * \; + \;{M_{\rm{cn}}}) & Equation\; 1 \\ \end{array}$$

- (2) Use compliant finishing materials according to the following criteria:
- (i) Demonstrate that each stain, sealer, and topcoat has a VHAP content of no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight by maintaining certified product data sheets for each coating and thinner;
- (ii) Demonstrate that each washcoat, basecoat, and enamel that is purchased pre-made, that is, it is not formulated onsite by thinning another finishing material, has a VHAP content of no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight by maintaining certified product data sheets for each coating and thinner; and
- (iii) Demonstrate that each washcoat, basecoat, and enamel that is formulated at the affected source is formulated using a finishing material

containing no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids) and a thinner containing no more than 3.0 percent VHAP by weight.

(3) Use a control system with an overall control efficiency (R) such that the value of  $E_{\rm ac}$  in Equation 2 is no greater than 1.0.

 $R=[(E_{bc}-E_{ac})/E_{bc}](100)$  Equation 2

The value of  $E_{bc}$  in Equation 2 shall be calculated using Equation 1; or

- (4) Use any combination of an averaging approach, as described in paragraph (a)(1) of this section, compliant finishing materials, as described in paragraph (a)(2) of this section, and a control system, as described in paragraph (a)(3) of this section.
- (b) The owner or operator of an affected source subject to §63.802(a)(2)(i) shall comply with the provisions by using compliant foam adhesives with a VHAP content no greater than 1.8 kg VHAP/kg solids (1.8 lb VHAP/lb solids), as applied.
- (c) The owner or operator of an affected source subject to 63.802(a)(2)(ii) shall comply with those provisions by using either of the methods presented in 63.804 (c)(1) and (c)(2).
- (1) Use compliant contact adhesives with a VHAP content no greater than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied; or
- (2) Use a control system with an overall control efficiency (R) such that the value of  $G_{ac}$  is no greater than 1.0.

 $R = [(G_{bc} - G_{ac})/G_{bc}] (100) \qquad Equation 3$ 

- (d) The owner or operator of a new affected source subject to §63.802(b)(1) may comply with those provisions by using any of the following methods:
- (1) Calculate the average VHAP content across all finishing materials used at the facility using Equation 1, and maintain a value of E no greater than 0.8:
- (2) Use compliant finishing materials according to the following criteria:
- (i) Demonstrate that each sealer and topcoat has a VHAP content of no more than 0.8 kg VHAP/kg solids (0.8 lb VHAP/lb solids), as applied, each stain has a VHAP content of no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight;